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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/820,300	04/08/2004	Gerald Falbel	402-128-4	7446

7590

03/15/2006

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EXAMINER

RATCLIFFE, LUKE D

ART UNIT PAPER NUMBER

3662

DATE MAILED: 03/15/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	<b>Application No.</b>	<b>Applicant(s)</b>	
	10/820,300	FALBEL, GERALD	
	<b>Examiner</b>	<b>Art Unit</b>	
	Luke D. Ratcliffe	3662	

**-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --**

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 08 April 2004.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-20 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-20 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 08 April 2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |   |   |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)             | 4) <input type="checkbox"/> Interview Summary (PTO-413)                     |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)    | Paper No(s)/Mail Date. _____  |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| Paper No(s)/Mail Date _____   | 6) <input type="checkbox"/> Other: _____                                    |

## DETAILED ACTION

### ***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims **1-9, 11-18, and 20** are rejected under 35 U.S.C. 103(a) as being unpatentable over Lego (4131791) in view of Brown (2002018839).

Referring to **claim 1 and 12**, Lego shows an airborne search and rescue system with a means mounted to an aircraft for generating and transmitting a laser signal (figure 1 Ref 8), a means mounted to a person to be located for reflecting said laser signal back to the aircraft that transmitted the laser signal (column 2 lines 1-20), and a means on an aircraft for processing the reflected laser signal from the means mounted to a person (figure 7). Lego does teach a means for stabilization of the search and rescue system but does not show the stabilization means using a galvanometer motor (column 9 lines 34-56).

Brown shows an apparatus for controlling a beam that could be used in a search and rescue system. Brown shows the use of a galvanometer motor (figure 2 Ref 1022 and 1024). It would have been obvious to modify Lego to include the galvanometer motor because this is a common type of motor that is used in this type of application and because Lego refers that there is a sort of motor that is used for the control of the optics of the transmission device (column 9 lines 34-56).

Referring to **claim 2 and 13**, Lego does teach a means for stabilization of the search and rescue system but does not show the stabilization means using a galvanometer motor (column 9 lines 34-56).

Brown shows an apparatus for controlling a beam that could be used in a search and rescue system. Brown shows the use of two galvanometer motors to control 2 axis of rotation (figure 2 Ref 1022 and 1024 and paragraph 14). It would have been obvious to modify Lego to include two galvanometer motors because control of the transmission beam in two axis would be optimal in the use of an aircraft mounted system to account for the pitch and the roll of the aircraft.

Referring to **claim 3, 8, 11, 14, 17, 20**, Lego does teach a means for stabilization of the search and rescue system but does not show the stabilization means using a galvanometer motor (column 9 lines 34-56).

Brown shows an apparatus for controlling a beam that could be used in a search and rescue system. Brown shows the use of two galvanometer motors to control 2 axis of rotation (figure 2 Ref 1022 and 1024 and paragraph 14), one of the axis is designated to pitch in the use of the aircraft (paragraph 106). It would have been obvious to modify Lego to include two galvanometer motors because control of the transmission beam in two axis would be optimal in the use of an aircraft mounted system to account for the pitch and the roll of the aircraft.

Referring to **claims 4, 5, 15**, Lego does teach a means for stabilization of the search and rescue system but does not show the stabilization means using a

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galvanometer motors (column 9 lines 34-56). However Logo does show a stabilization means attached to mirrors for directing the beam (column 9 lines 33-56).

Brown shows the motors that are attached to flat mirrors (paragraph 14 and figure 2 Reference 1018 and 1020). It would have been obvious to modify Lego to include the flat mirrors attached to the galvanometer motors because Lego already uses mirrors to direct the transmission beam connected to other types of motors.

Referring to **claim 6 and 16**, it would be obvious with the implementation of an aircraft mounted search and rescue system to have the flat mirror able to direct a 90 degree scan on the ground.

Referring to **claim 7**, Lego does teach a means for stabilization of the search and rescue system but does not show the stabilization means using a galvanometer motors that get an input from a vertical gyro or internal measurement unit (column 9 lines 34-56). However Logo does show a stabilization means attached to mirrors for directing the beam (column 9 lines 33-56).

Brown shows the motors that are that have an input obtained by a vertical gyro or internal measurement unit (paragraphs 14 and 20-22). It would have been obvious to modify Lego to include the motors that receive an input from a vertical gyro or internal measurement unit because this automates the transmission system.

Referring to **claim 9 and 18**, Lego does teach a means for stabilization of the search and rescue system but does not show the stabilization means using a galvanometer motors that is adapted to compensate for bearing friction (column 9 lines

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34-56). However Logo does show a stabilization means attached to mirrors for directing the beam (column 9 lines 33-56).

Brown shows the motors that are adapted to compensate for bearing friction (paragraph 22). It would have been obvious to modify Lego to include the motors that compensate for bearing friction because this controls error from the friction in the bearings.

Claims **10 and 19** are rejected under 35 U.S.C. 103(a) as being unpatentable over Lego (4131791) in view of Brown (2002018839) as applied to claim 9 above, and further in view of Watkins (3820742).

Referring to claims **10 and 19**, Lego does teach a means for stabilization of the search and rescue system but does not show the stabilization means using a galvanometer motors that is adapted to compensate for bearing friction (column 9 lines 34-56). However Logo does show a stabilization means attached to mirrors for directing the beam (column 9 lines 33-56).

Brown shows the motors that are adapted to compensate for bearing friction (paragraph 22). It would have been obvious to modify Lego to include the motors that compensate for bearing friction because this controls error from the friction in the bearings. However Brown does not show a roll stabilization that is provided by utilizing the rotational angular inertia of a stabilized platform of the system for reduce the required torque and power of a roll stabilization servo system

Watkins shows a roll stabilization that is provided by utilizing the rotational angular inertia of a stabilized platform of the system for reduce the required torque and

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power of a roll stabilization servo system (column 4 lines 29-40). It would have been obvious to further modify Lego to include angular inertia of a stabilized platform to reduce the required torque and power of a roll stabilization servo system because this allows for a more accurate and automated transmitting system.

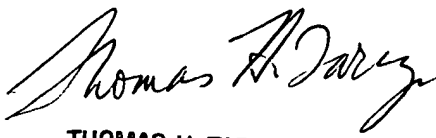
Any inquiry concerning this communication or earlier communications from the examiner should be directed to Luke D. Ratcliffe whose telephone number is 571-272-3110. The examiner can normally be reached on 8:00-4:30 M-F.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Thomas Tarcza can be reached on 571-272-6979. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

LDR

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